## **ABSTRACT**

A cable distribution system with distributed architecture in a multi-dwelling unit or building(s). Each dwelling has at least one Room Interface Unit (RIU), one for each television. There is a local service module associated with a group of dwellings/RIUs (e.g., one per floor). There is also a local headend in the vicinity or in the building or set of buildings. The local headend has a block of integrated receiver/decoders which can be controlled to tune in a selected video channel. The selected video channels and a group of standard channels are multiplexed and sent to the local service modules where a group of programmable converters (one for each RIU) place the channel selected by its corresponding RIU at a predetermined frequency. All of the RIUs associated with a particular local service module can receive a single multiplexed signal and each RIU uses bandpass filtering to select its selected channel. Forward and return DOCSIS channels are also provided.

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